

What is claimed is:

1.

A washing appliance clutch for transferring rotational power from a motor to a driven basket for rotating the driven basket about a basket axis, the washing appliance clutch comprising:

a drive member adapted to be driven by the motor for rotation about a drive axis;
an intermediate plate engaged by the drive member for rotation with the drive member about the drive axis;
the intermediate plate having an outer peripheral edge;
a hub surrounding the outer peripheral edge of the intermediate plate in close spaced relation thereto;
the outer peripheral edge of the intermediate plate being capable of flexing in response to centrifugal force during rotation of the intermediate plate from a retracted position free from engagement with the hub to an expanded position engaging the hub and rotating the hub about the drive axis.

2.

A washing appliance clutch according to claim 1 wherein the intermediate plate includes a plurality of cutout portions that create a plurality of weakened points in the intermediate plate, the weakened points in the intermediate plate permitting flexing of the intermediate plate in response to centrifugal force during rotation of the intermediate plate.

3.

A washing appliance according to claim 2 wherein a first group of the cutout portions comprise slots extending from the outer peripheral edge inwardly toward the drive axis.

4.

A washing appliance according to claim 3 wherein a second group of the cutout portions are located completely inwardly from the peripheral edge of the intermediate plate.

5.

A washing appliance according to claim 4 wherein the drive member includes a first cam surface and the intermediate plate includes a first cam follower surface engaging the first cam surface of the drive member.

6.

A washing appliance according to claim 5 wherein the motor includes an agitator mode in which it drives the drive member in a first rotational direction, the motor including a spin mode in which it drives the drive member in a second rotational direction.

7.

A washing appliance according to claim 6 wherein the first cam surface and the first cam follower surface cooperate to flex the outer peripheral edge of the intermediate plate from the retracted to the expanded position during rotation of the drive member in the second direction when the motor is in the agitator mode.

8.

A washing appliance according to claim 7 wherein the outer peripheral edge of the intermediate plate flexes from the retracted to the expanded positions solely in response to centrifugal force during rotation of the intermediate plate when the motor is in the spin mode.

9.

A washing appliance according to claim 1 and further comprising a high friction material positioned between the outer peripheral edge of the intermediate plate and the hub for facilitating frictional engagement between the hub and the outer peripheral edge of the intermediate plate during rotation of the intermediate plate.

10.

In combination:

a washing appliance having a basket mounted for rotation about a drive axis;
a motor capable of imparting rotational power;
a drive member driven by the motor for rotation about the drive axis;
an intermediate plate engaged by the drive member for rotation with the drive member about the drive axis;
the intermediate plate having an outer peripheral edge;
a hub surrounding the outer peripheral edge of the intermediate plate and being attached to the basket;
the outer peripheral edge of the intermediate plate being capable of flexing in response to centrifugal force during rotation of the intermediate plate from a retracted position free from engagement with the hub to an expanded position engaging the hub and rotating the hub about the drive axis.

11.

A method for transferring rotational movement from a motor to a washing appliance basket mounted within a washing appliance for rotation about a drive axis, the method comprising:

connecting the motor to a drive member;
placing the drive member in driving connection with an intermediate plate so that rotation of the drive member will cause rotation of the intermediate plate, the

intermediate plate having an expandable outer peripheral edge;

surrounding the outer peripheral edge of the intermediate plate with an annular hub connected to rotate the washing appliance basket;

activating the motor to rotate the drive member and cause rotation of the intermediate plate, whereby the outer peripheral edge of the intermediate plate will flex in response to centrifugal force from a retracted position spaced in an inner radial direction from the annular hub to an expanded position frictionally engaging and rotating the hub and the washing appliance basket.

12.

A method according to claim 11 wherein the rotation of the drive member by the motor is in a first rotational direction, the motor being reversible to cause rotation of the drive member in a second rotational direction opposite from the first rotational direction.

13.

A method according to claim 11 wherein the motor is capable of operating in a spin mode to rotate the drive member continuously only in the first rotational direction, and the motor is capable of operating in an agitator mode to rotate the drive member in the second rotational direction.